

## **REMARKS**

Claims 1-20 are now pending in the application. Minor amendments have been made to the claims to overcome the objections to the specification and rejections of the claims under 35 U.S.C. § 112. The amendments to the claims contained herein are in part intended to broaden the scope thereof and, thus, are not a narrowing amendment. The Examiner is respectfully requested to reconsider and withdraw the rejection(s) in view of the amendments and remarks contained herein.

### **REJECTION UNDER 35 U.S.C. § 112**

Claims 1-3 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point and distinctly claim the subject matter which Applicant regards as the invention. This rejection is respectfully traversed.

Applicant has amended claims 1-3 in response to the rejection. Accordingly, Applicant respectfully submits that claims 1-3 overcome the rejection under 35 U.S.C. § 112 and respectfully request withdrawal of the same.

### **REJECTION UNDER 35 U.S.C. § 102**

Claims 1-2 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Turner (U.S. Pub. No. 2004/0253921). This rejection is respectfully traversed.

Applicant respectfully submits that Turner fails to anticipate claims 1 or 2. More particularly, Applicant respectfully submits that Turner fails to anticipate an analysis module receiving at least one of a voltage sensor signal or current sensor signal from the sensor. The Examiner refers to Fig. 1 of Turner providing such teaching. More

particularly, the Examiner refers to transducer package 15 as the sensor component, and analysis and communications package 69 as the analysis module component. The Examiner further asserts that the analysis module component receives at least one of a voltage and current signal from the sensor component. Applicant respectfully refers the Examiner to Fig. 1 of Turner. The analysis and communications package 69 referred to by the Examiner clearly only receives Fast Fourier Transform (FFT) information from transducer package 15. The analysis and communications package 69 receiving FFT information from transducer package 15 differs significantly from the claimed analysis module received in at least one of a voltage sensor signal or current sensor signal from the sensor. FFT information is not the same as a voltage sensor signal or current sensor signal received from the sensor. As can be seen in Fig. 1 of Turner, the sensor signals are at best input to an A/D converter 63, but are clearly not applied to analysis or communications package 69. Turner clearly fails to provide any teaching regarding the signals from the voltage sensor or current sensor being applied to the analysis module.

In view of the foregoing, Applicant respectfully submits that claims 1-2 distinguish over the art cited by the Examiner and respectfully request withdrawal of the rejection.

#### **REJECTION UNDER 35 U.S.C. § 103**

A. Claims 4, 5, 7, 8, and 10-14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Turner (U.S. Pub. No. 2004/0253921) in view of Frye (U.S. Pat. No. 5,737,496). This rejection is respectfully traversed.

Applicant respectfully submits that Turner in view of Fries fail to teach or suggest claim 4. In particular, the Examiner asserts that paragraphs 0058, 0059, 0066, and 0067 of Turner teach or suggest the step of determining a frequency response characteristic of the base sensor. The cited paragraphs of Turner fail to make any teaching or suggestion regarding a base sensor and further fail to provide any teaching or suggestion regarding determining a frequency response characteristic of the base sensor. Applicant has thoroughly reviewed the paragraph cited by the Examiner to locate teaching or suggestion regarding determining a frequency response characteristic of the base sensor. Applicant can find no such teaching and respectfully requests that the Examiner refer the Applicant to the specific portions of said paragraphs where the Examiner believes that such step of determining is taught or suggested.

Applicant has reviewed the cited paragraph 0055 in connection with the Examiner's assertion that this paragraph teaches determining a response characteristic of a base analysis module. The Applicant can find no such teaching or suggestion. At no point in the cited paragraph 0055 does Turner make any remote teaching or suggestion regarding determining a response characteristic of the base analysis module. Applicant again respectfully requests that the Examiner cite the specific portion of paragraph 0055 in which such teaching occurs. Applicant has also reviewed paragraph 0079 through 0081, which the Examiner relies upon as teaching the step of characterizing a frequency response of a group of sensors other than the base sensor and can find no teaching or suggestion of the claimed step. Turner fails to make any distinction between a base sensor and a group of sensors other than the base sensor.

Fig. 13, which the cited paragraphs in Turner discuss, is directed to an RF power delivery diagnostic system. Fig. 13 does not remotely teach or suggest the step of characterizing the frequency response of a group of sensors other than the base sensor. Again, Applicant respectfully requests that the Examiner cite specific portions of the paragraphs which the Examiner believes could possibly teach or suggest the claimed step.

The Examiner also relies upon Frye as teaching the step of generating a scaling matrix in accordance with the calibration coefficients. Applicant respectfully submits that Turner and Frye are an improper combination, as one is directed to a transducer package for process control, while the other is directed to a neural network controller for a plasma etching process. Although the two references are related to process control, no teaching in connection with the transducer control package provides any motivation for combination with neural network control for a plasma etch process, and vice versa. Thus, Frye cannot be combined with Turner. A careful review of the cited passages from Frye (column 7, line 44 to column 8, line 11) indicates that the coefficients referred to in Frye at best appear to relate to weighting coefficients that connect a neural network. Applicant can find no teaching or suggestion in the cited paragraphs that relate to generating a scaling matrix in accordance with calibration coefficients. More particularly, Applicant can find no teaching or suggestion in connection with any matrix in the cited passage.

In view of the foregoing, Applicant respectfully submits that claims 4, 5, 7, 8, and 10-14 define over the art cited by the Examiner.

B. Claim 9 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over Turner (U.S. Pub. No. 2004/0253921) in view of Gerrish (U.S. Pat. No. 6,449,568). Applicant respectfully traverses the rejection.

Applicant respectfully submits that the arguments made above with respect to Turner apply equally hereto. Further, even if Turner and Gerrish can be combined, in view of the arguments made above, the proposed combination fails to teach claim 9. In view of the foregoing, Applicant respectfully requests withdrawal of the rejection.

#### **ALLOWABLE SUBJECT MATTER**

The Examiner states that claims 3 and 6 would be allowable if rewritten in independent form. Accordingly, Applicant elects to defer amending claims 3-6 until the Examiner has reexamined and reconsidered the other pending claims.

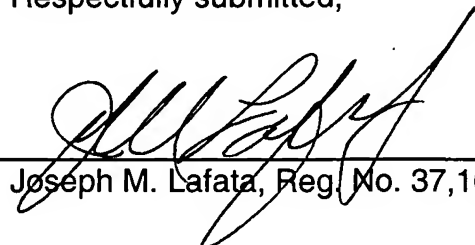
#### **CONCLUSION**

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the

Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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